

**REMARKS**

In the Office Action mailed April 23, 2007, the Office Action rejected claims 1-32 under 35 U.S.C. § 103. Claims 1, 22, 31 and 32 have been amended.

Applicant respectfully responds to this Office Action.

**I. Claims 1-9, 11, 22-29 and 31-32 Rejected Under 35 U.S.C. § 103**

The Office Action rejected claims 1-9, 11, 22-29 and 31-32 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,069,871 to Sharma (hereinafter, “Sharma”) in view of U.S. Patent No. 6,026,301 to Satarasinghe (hereinafter, “Satarasinghe”) further in view of U.S. Patent No. 5,737,704 to Jin (hereinafter, “Jin”). This rejection is respectfully traversed.

The factual inquiries that are relevant in the determination of obviousness are determining the scope and contents of the prior art, ascertaining the differences between the prior art and the claims in issue, resolving the level of ordinary skill in the art, and evaluating evidence of secondary consideration. KSR Int’l Co. v. Teleflex Inc., 550 U.S. \_\_\_, 2007 U.S. LEXIS 4745, at \*\*4-5 (2007) (citing Graham v. John Deere Co. of Kansas City, 383 U.S. 1, 17-18 (1966)). To establish a *prima facie* case of obviousness, the prior art references “must teach or suggest all the claim limitations.” M.P.E.P. § 2142. Moreover, the analysis in support of an obviousness rejection “should be made explicit.” KSR, 2007 U.S. LEXIS 4745, at \*\*37. “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” Id. (citing In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006)).

Applicant respectfully submits that the claims at issue are patentably distinct from the cited references. The cited references do not teach or suggest all of the limitations in these claims.

Claim 1 has been amended to recite “ranking said plurality of frequencies, wherein the ranking of a particular frequency is determined by the number of additional frequencies that overlap the particular frequency.” Support for this amendment may be found in Applicants’ specification, for example, page 13, lines 8-19 and page 19, lines 20-21. Sharma, Satarasinghe or Jin, alone or in combination with, do not teach or suggest this claim element.

Instead Sharma states:

[I]f any BTS has been considered at step 516, operation proceeds to step 520 where it is determined whether any of the BTSs that have responded have an NEC greater than  $NEC_i$ . If not, operation proceeds to step 522 wherein the BTS with the highest NEC value is selected. If so, operation proceeds to step 524 wherein the BTS with the highest frequency priority from the set of responding BTSs that have an  $NEC_i$  that is greater than  $NEC_{ii}$ .  $NEC_{ii}$  is set by the system operator.

Sharma, col. 9, lines 3-11.

Determining if “NEC [is] greater than  $NEC_i$ ” does not teach or suggest “ranking said plurality of frequencies, wherein the ranking of a particular frequency is determined by the number of additional frequencies that overlap the particular frequency.” There is no teaching that the NEC with the highest value “is determined by the number of additional frequencies that overlap the particular frequency.”

Regarding the NEC, Sharma states “[t]his is the maximum excess capacity of a BTS.” Sharma, col. 8, lines 33-34. Sharma further states “[i]t [the NEC] is calculated by taking into account EFC, ERC,  $(EFC)_{bt}$ ,  $(ERC)_{bt}$ , ECE and EWC.” Id., col. 8, lines 34-35. Sharma states that EFC is the “Excess Forward Link Capacity”, ERC is the “Excess Reverse Link Capacity”,  $(EFC)_{bt}$  is the “Excess Forward Link Capacity Blocking Threshold”,  $(ERC)_{bt}$  is the “Excess Forward Link Capacity Blocking Threshold, ECE is the “Excess Number of Channel Elements” and EWC is the “Excess Number of Walsh Codes.” Id., col. 8, lines 14-30. Thus, there is no teaching or suggestion that “EFC, ERC,  $(EFC)_{bt}$ ,  $(ERC)_{bt}$ , ECE and EWC” which are used to calculate the NEC teach or suggest “ranking said plurality of frequencies, wherein the ranking of a particular frequency is determined by the number of additional frequencies that overlap the particular frequency.”

Sharma also states:

In performing dynamic load balancing, the BSCs 104 and 106 query BTSs 110A, 110B and 112A, 112B, respectively to determine loading. Depending upon loading in cells 122A, 122B, 124A and 124B, the wireless communication system 100 either directs the mobile unit 134 to execute a soft handoff on the first carrier frequency to BTSs 110A and 112A or to execute a hard handoff by moving from the first carrier frequency to the second carrier frequency served to BTSs 110B and 112B.

Sharma, col. 5, lines 52-60.

The Office Action points to the above cited-passage of Sharma to support the assertion that “it is inherent that in order for those base stations being queried they must be contained in a database.” Office Action, page 23. However, directing “the mobile unit . . . to execute a soft handoff on the first carrier frequency . . . or to execute a hard handoff . . . to the second carrier frequency” does not teach or suggest “ranking said plurality of frequencies, wherein the ranking of a particular frequency is determined by the number of additional frequencies that overlap the particular frequency.” There is no teaching or suggestion in the above cited paragraph of Sharma of ranking “the first carrier frequency . . . or . . . the second carrier frequency.” Further, there is no teaching that a ranking of “the first carrier frequency . . . or . . . the second carrier frequency” is “determined by the number of additional frequencies that overlap the particular frequency” as claimed by Applicant.

The additions of Satarasinghe and Jin do not overcome the deficiencies of Sharma. The Office Action merely points to Satarasinghe to support the assertion that “Satarasinghe teaches determining . . . which mobile stations are within an inner coverage area.” Office Action, page 17. The Office Action also simply points to Jin to support the assertion that “Jin teaches initiating handoff of at least one mobile station within the inner coverage area to a different frequency on the cell.” Office Action, page 18. However, the Office Action does not point to (and Applicant cannot find) any teachings or suggestions by Satarasinghe or Jin of “ranking said plurality of frequencies, wherein the ranking of a particular frequency is determined by the number of additional frequencies that overlap the particular frequency.”

In view of the foregoing, Applicant respectfully submits that claim 1 is patentably distinct from Sharma, Satarasinghe and Jin, alone or in combination. Accordingly, Applicant respectfully requests that the rejection of claim 1 be withdrawn.

Claims 2-9 and 11 depend either directly or indirectly from claim 1. Accordingly, Applicant respectfully requests that the rejection of claims 2-9 and 11 be withdrawn for at least the same reasons as those presented above in connection with claim 1 because Sharma, Satarasinghe and Jin, alone or in combination, do not teach or suggest all of the claim elements of claim 1.

Claim 22 has been amended with a similar claim limitation as provided above in connection with claim 1. As such, Applicant respectfully submits that claim 22 is patentably

distinct from Sharma, Satarasinghe and Jin, alone or in combination, for at least the same reasons as those presented above in connection with claim 1. Accordingly, Applicant respectfully requests that the rejection of claim 22 be withdrawn because Sharma, Satarasinghe and Jin, alone or in combination, do not teach or suggest all of the claim elements of claim 22.

Claims 23-30 depend either directly or indirectly from claim 22. Accordingly, Applicant respectfully requests that the rejection of claims 23-30 be withdrawn for at least the same reasons as those presented above in connection with claim 22 because Sharma, Satarasinghe and Jin, alone or in combination, do not teach or suggest all of the claim elements of claim 22.

Claim 31 has been amended with a similar claim limitation as provided above in connection with claim 1. As such, Applicant respectfully submits that claim 31 is patentably distinct from Sharma, Satarasinghe and Jin, alone or in combination, for at least the same reasons as those presented above in connection with claim 1. Accordingly, Applicant respectfully requests that the rejection of claim 31 be withdrawn because Sharma, Satarasinghe and Jin, alone or in combination, do not teach or suggest all of the claim elements of claim 31.

Claim 32 has been amended with a similar claim limitation as provided above in connection with claim 1. As such, Applicant respectfully submits that claim 32 is patentably distinct from Sharma, Satarasinghe and Jin, alone or in combination, for at least the same reasons as those presented above in connection with claim 1. Accordingly, Applicant respectfully requests that the rejection of claim 32 be withdrawn because Sharma, Satarasinghe and Jin, alone or in combination, do not teach or suggest all of the claim elements of claim 32.

## **II. Claim 10 Rejected Under 35 U.S.C. § 103**

The Office Action rejected claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Sharma, Satarasinghe and Jin, further in view of U.S. Patent No. 5,781,861 to Kang (hereinafter, “Kang”). This rejection is respectfully traversed. The standard to establish a *prima facie* case of obviousness is provided above.

Claim 10 depends indirectly from claim 1. Accordingly, Applicant respectfully requests that the rejection of claims 10 be withdrawn for at least the same reasons as those presented above in connection with claim 1 because Sharma, Satarasinghe, Jin and Kang, alone or in combination, do not teach or suggest all of the claim elements of claim 1.

**III. Claims 12-21 Rejected Under 35 U.S.C. § 103**

The Office Action rejected claims 12-21 under 35 U.S.C. § 103(a) as being unpatentable over Sharma, Satarasinghe and Jin, further in view of U.S. Patent No. 5,826,190 to Krutz (hereinafter, "Krutz"). This rejection is respectfully traversed. The standard to establish a *prima facie* case of obviousness is provided above.

Claims 12-21 depend indirectly from claim 1. Accordingly, Applicant respectfully requests that the rejection of claims 12-21 be withdrawn for at least the same reasons as those presented above in connection with claim 1 because Sharma, Satarasinghe, Jin and Krutz, alone or in combination, do not teach or suggest all of the claim elements of claim 1.

**REQUEST FOR ALLOWANCE**

In view of the foregoing, Applicant respectfully submits that all of the pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

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